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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/775,820	02/10/2004	David Paul Yach	1578.107(11428-1-US-PAT)	8193

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EXAMINER	
SHARMA, SUJATHA R	
ART UNIT	PAPER NUMBER
2618	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/775,820	YACH ET AL.	
	Examiner	Art Unit	
	SUJATHA SHARMA	2618	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *12/6/07*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-9,11,12 and 17-20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-9,11,12 and 17-20* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

Response to Arguments

1. Applicant's arguments with respect to claims 1-9, 11, 12, 14-20 have been considered but they are not persuasive.

First the applicant argues that it was improper for the Examiner to have combined Chase, Ramanujam and Yianilos because the references cannot be combined without rendering at least one of them inoperative for its intended purpose or without substantially revising the reference and second, even if Chase, Ramanujam and Yianilos could be combined, their combination does not disclose each and every pending claim limitation.

Further the applicant argues that the references can be combined only if there is a reasonable expectation of the combined references' succession achieving the claimed result.

The applicant further argues that the examiner did not present any one single reason to combine the references.

The examiner respectfully disagrees and would like to point out the following:

The primary reference Chase discloses a method of automatic synchronization between a handheld device and a host computer having a network part at which a network-copy database is maintained and a mobile node at which a mobile-copy database is maintained. See col. 3, lines 29-34, col. 12, line 65 – col. 13, line 30, col. 14, lines 1-10 and 62-67

The secondary reference Ramanujam discloses a method wherein the synchronization request includes within it a record to be updated in the mobile node, the record to be updated being identified within the synchronization request by an integer generated from the map and identifying to both the mobile node and to the network part, the mobile node record to be updated. See col. 3, lines 21-40; col. 4, line 30 – col. 6, line 18

Thus Chase and Ramanujam, in the same field of endeavor can be combined. The motivation for one with ordinary skill in the art at the time the invention was made is to update the records before synchronizing them in the mobile copy data base and the network copy database and doing it without departing from the defined invention of Chase.

Further, Yialnilos, in the same field of endeavor, teaches a method of where the data to be synchronized is filtered and only those data records that are missing on the other side (i.e. a field of the data record of the network-copy database fails to have a corresponding field of the corresponding data record of the mobile- copy database) are transferred to achieve synchronization. See page 5, paragraph 67

Therefore while Chase and Ramanujam disclose a method of updating and synchronizing the whole database in the mobile copy and the network copy, combining Yianilos with Chase and Ramanujam adds another important feature of synchronizing only those data records that were updated since the last synchronization. The motivation for one with ordinary skill in the art at the time the invention was made is to avoid unnecessary transfer of large amounts of data that do not need synchronization and thus efficiently use the available resources.

Therefore the rejection of the claims 1-9,11,12,14-20 submitted in the previous office action and as discussed below is considered proper.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1-9, 15-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chase [US 5,974,238] in view of Ramanujam [US 7,213,039] and further in view of Yianilos [US 2002/0029214].

Regarding claim 1, Chase discloses a method of automatic synchronization between a handheld device and a host computer. Chase further discloses a radio communication system having

- a network part at which a network-copy database is maintained and a mobile node at which a mobile-copy database is maintained. See col. 3, lines 29-34

an apparatus for facilitating synchronization of data stored at the network-copy database, said apparatus comprising:

- a mapper embodied at the network part, said mapper selectably operable to form a map between fields of a data record of a network-copy database, the network-copy database having a network-copy schema and fields of a corresponding data record of the mobile-copy database, the mobile-copy database having a mobile schema; see col. 12, line 65 – col. 13, line 30
- the map indexing together the fields of the data record of the network-database with the fields of the corresponding data record of the mobile-copy database, see col. 12, line 65 – col. 13, line 30, col. 14, lines 1-10 and 62-67
- said mapper forming the map upon detection of change to the data record of the network-copy database. See col. 3, lines 38-52 where the modification to the data records in the handheld or the host computer is detected and the synchronization of the records start.

Also the checksum acts as the detector detecting any changes in the data records. See col. 13, lines 5-17

- a synchronization request generator that receives the map, generates a synchronization request from the map, and which provides the synchronization request to a synchronization server; See col. 12, lines 24 – 33 where there is a request generated for the data synchronization.

However, Chase fails to disclose a method wherein the synchronization server generates a synchronization request to be sent to a mobile node, the synchronization request including within it a record to be updated in the mobile node, the record to be updated being identified within the synchronization request by an integer generated from the map and identifying to both the mobile node and to the network part, the mobile node record to be updated.

Ramanujam, in the same field of endeavor, teaches a method wherein the synchronization server generates a synchronization request to be sent to a mobile node, the synchronization request including within it a record to be updated in the mobile node, the record to be updated being identified within the synchronization request by an integer generated from the map and identifying to both the mobile node and to the network part, the mobile node record to be updated. See col. 3, lines 21-40; col. 4, line 30 – col. 6, line 18

Therefore it would have been obvious to one with ordinary skill in the art at the time the invention was made to provide the above teachings of Ramanujam to Chase in order to provide more efficient and proper synchronization of records and avoid unnecessary synchronization of data records.

Chase as modified by Ramanujam discloses all the limitations as claimed but fails to disclose a method where the mobile copy database schema is different from the network-copy database schema

Further, chase does not disclose a method comprising a filter embodied at the network part and adapted to receive the synchronization request formed by said synchronization request to be sent to a mobile node, the synchronization request including data for a record in the network-copy database that is to be copied into a record to be updated in the mobile node, the mobile node record to be updated being identified within the synchronization request by an integer generated from the map and identifying to both the mobile node and to the network part, the mobile node record to be updated.

Yianilos, in the same field of endeavor, teaches a method where the mobile copy database schema is different from the network-copy database schema. See page 5, paragraph 67.

Further, Yianilos teaches a method where the synchronization request including data for a record in the network-copy database that is to be copied into a record to be updated in the mobile node, the mobile node record to be updated being identified within the synchronization request by an integer generated from the map and identifying to both the mobile node and to the network part, the mobile node record to be updated. See page 5, paragraph 67.

Therefore it would have been obvious to one with ordinary skill in the art at the time the invention was made to provide the above teachings of Yianilos to Chase in order to avoid unnecessary transfer of large amounts of data and thus efficiently use the available resources.

Regarding claim 2, Chase further discloses a method comprising a detector embodied at the network part, coupled to the network-part database, and to said mapper, said detector for detecting the change to the data record of the network-copy database and for providing an indication of the change to said mapper. See col.3, lines 38-52, col. 9, line 67 – col. 10, line 7, see col. 12, line 65 – col. 13, line 30, col. 14, lines 1-10 and 62-67. Here any modification to the data record in the hand held or the host computer is detected and the synchronization module is operative to automatically synchronize the data records.

Regarding claim 3, Chase further discloses a method comprising a synchronization request generator embodied at the network part and coupled to said mapper, said synchronization request generator for generating a network-initiated synchronization request responsive to formation of the map by said mapper. See col. 12, lines 24 – 33 where there is a request generated for the data synchronization.

Regarding claim 4, Chase further discloses a method wherein the synchronization request formed by said synchronization request generator comprises indicia associated with the map generated by said mapper. See col. 12, line 65 – col. 13, line 30, col. 14, lines 1-10 and 62-67

Regarding claim 5, Chase further discloses a method wherein the synchronization request formed by said synchronization request generator further comprises indicia associated with the data record of which change thereto is detected. See col. 3, lines 38-52 where the modification to

the data records in the handheld or the host computer is detected and the synchronization of the records start.

Regarding claim 6, Chase further discloses a method wherein the indicia associated with the data record and of which the synchronization request is further comprised comprises values of the data record. See col. 9, line 65 – col. 10, line 7, col. 10, lines 66,67

Regarding claim 7, Chase further discloses a method wherein the data record is formed of a first field and at least a second field and wherein the values of the data record comprised in the synchronization request formed by said synchronization request generator comprises values populating at least one of the first and at least second fields, respectively. See col. 13, lines 18-30, col. 14, lines 1-10 and lines 62-67. Here for example the address consists of the name as the first field and city as the second field.

Regarding claim 8, Chase further discloses a method wherein the values of the data record comprised in the synchronization request comprise values populating each of the first and at least second fields. See col. 13, lines 18-30, col. 14, lines 1-10 and lines 62-67. Here for example the address consists of the name as the first field and city as the second field.

Regarding claim 9, Chase further discloses a method wherein the fields of the data record of the network-copy database and mapped by said mapper are of a first number, wherein the fields of the corresponding data record of the mobile-copy database and mapped by said mapper are

of a second number, the first number dissimilar with the second number. See col. 13, lines 5-17 where the check sum / first number of the network-copy database is different from the check sum/second number of the mobile-copy database.

Regarding claim 11, Chase further discloses a method comprising a converter embodied at the network part and coupled to said filter to receive the normalized mapped values formed thereat, said converter for converting the normalized mapped values into a radio air format, for communication to the mobile node pursuant to the synchronization of the data. See col. 3, lines 46-52 and col. 6, lines 16-45 where the data synchronization occur using wireless communication transports

Regarding claim 12, Chase further discloses a method wherein the radio air format into which said converter converts the normalized mapped values comprises a tag-length format. See col. 13, lines 50-52, col. 14, lines 52-67 and col. 15, lines 1-12 wherein the tag length is defined so that the packet can be transmitted using current wireless communication transports

Regarding claim 14, Yianilos further discloses a method wherein said filter further filters map portions in which a field of the data record of the network copy database is absent a change. See col. 5, paragraph 67.

Regarding claim 15, Chase further discloses a method of communicating in a radio communication system having a network part at which a network-copy database is maintained and a mobile node at which a mobile copy database is maintained (see col. 3, lines 29-34) an improvement of a method for facilitating synchronization of data stored at the network copy database with data stored at the mobile copy database, said method comprising:

- detecting a change to a data record of the network copy database; See col. 3, lines 38-52 where the modification to the data records in the handheld or the host computer is detected and the synchronization of the records start. Also the checksum acts as the detector detecting any changes in the data records. See col. 13, lines 5-17
- forming a map between fields of the data record of the network copy database having a network schema and fields of a corresponding data record of the mobile copy database, the mobile copy database having a mobile copy schema; see col. 12, line 65 – col. 13, line 30
- the map indexing together the fields of the data record of the network copy database with the fields of the corresponding data record of the mobile copy database. see col. 12, line 65 – col. 13, line 30, col. 14, lines 1-10 and 62-67
- generating a synchronization request that is responsive to the map and which identifies a data record in a mobile node to be updated and including the content of the record in the network-copy database to be copied into the mobile copy database; See col. 12, lines 24 – 33 where there is a request generated for the data synchronization.

However, Chase fails to disclose a method of formatting the synchronization request to identify a record to be updated in the mobile node by including an integer generated from the map and

identifying to both a mobile node and to a network part, a record to be updated in a mobile node; and sending the synchronization request to a mobile node.

Ramanujam, in the same field of endeavor, teaches a method of formatting the synchronization request to identify a record to be updated in the mobile node by including an integer generated from the map and identifying to both a mobile node and to a network part, a record to be updated in a mobile node; and sending the synchronization request to a mobile node. See col. 3, lines 21-40; col. 4, line 30 – col. 6, line 18

Therefore it would have been obvious to one with ordinary skill in the art at the time the invention was made to provide the above teachings of Ramanujam to Chase in order to provide more efficient and proper synchronization of records and avoid unnecessary synchronization of data records.

Chase as modified by Ramanujam discloses all the limitations as claimed but fails to disclose a method where the mobile copy database schema is different from the network-copy database schema

Further, chase does not disclose a method comprising a filter embodied at the network part and adapted to receive the synchronization request formed by said synchronization request generator, said filter for filtering from the synchronization request map portions in which a field of the data record of the network-copy database fails to have a corresponding field of the corresponding data record of the mobile- copy database, the synchronization request, once filtered, comprising normalized map values.

Yianilos, in the same field of endeavor, teaches a method where the mobile copy database schema is different from the network-copy database schema. See page 5, paragraph 67.

Further, Yianilos teaches a method where the data to be synchronized is filtered and only those data records that are missing on the other side (i.e. a field of the data record of the network-copy database fails to have a corresponding field of the corresponding data record of the mobile- copy database) are transferred to achieve synchronization thus avoiding unnecessary transfer of large amounts of data. See page 5, paragraph 67.

Therefore it would have been obvious to one with ordinary skill in the art at the time the invention was made to provide the above teachings of Yianilos to Chase in order to avoid unnecessary transfer of large amounts of data and thus efficiently use the available resources.

Regarding claim 16, Chase further discloses a method comprising the operation of generating a network initiated synchronization request responsive to formation of the map formed during said operation of forming. See col. 12, lines 24 – 33 where there is a request generated for the data synchronization.

Regarding claim 17, Chase further discloses a method wherein the synchronization request generated during said operation of generating comprises indicia associated with the map formed during said operation of forming. See col. 12, line 65 – col. 13, line 30, col. 14, lines 1-10 and 62-67

Regarding claim 18, Yianilos further discloses a method comprising the operation of filtering, from the synchronization request, selected map portions thereof to form normalized mapped values. See page 5, paragraph 67.

Regarding claim 19, Yianilos further discloses a method comprising the operation of converting the normalized mapped values into a radio air format. See col. 3, lines 46-52 and col. 6, lines 16-45 where the data synchronization occur using wireless communication transports

Regarding claim 20, Yianilos further discloses a method comprising the operation of sending selected normalized mapped values, once converted into the radio air format, to the mobile node pursuant to the synchronization therewith. See col. 3, lines 46-52 and col. 6, lines 16-45 where the data packets are transmitted and synchronization occurs using wireless communication transports.

Conclusion

3. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sujatha Sharma whose telephone number is 571-272-7886. The examiner can normally be reached on Mon-Fri 7.30am - 4.00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew D. Anderson can be reached on 571-272-4177. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/S. S./
Primary Examiner, Art Unit 2618
Sujatha Sharma
March 15, 2008